To: Woolford, James[Woolford.James@epa.gov]

Cc: Lindsay, Nancy[Lindsay.Nancy@epa.gov]; Meer, Daniel[Meer.Daniel@epa.gov]; Lyons,

John[Lyons.John@epa.gov]

From: Manzanilla, Enrique

Sent: Fri 8/12/2016 5:39:02 PM

Subject: Re: East Chicago press clips

Yes it is an exide plant which has been closed for a couple of years.

Levels in Vernon and other residential neighborhoods are about the same as described in article.

Sent from my iPhone

On Aug 12, 2016, at 9:46 AM, Woolford, James < Woolford. James @epa.gov > wrote:

Is Vernon CA excide site?

Jim Woolford, Director Office of Superfund Remediation & Technology Innovation US EPA

Sent from my Windows Phone Please excuse typos

From: Bassler, Rachel Sent: 8/12/2016 11:18 AM

**To:** Benenati, Frank; Stanislaus, Mathy; Natarajan, Nitin; Breen, Barry; Lowery, Brigid; Harrison, Melissa; Colip, Matthew; Kaplan, Robert; Mitchell, James; Ballotti, Doug; Borries, Samuel; El-Zein, Jason; Brown, Jaime; Benning, Brad; Behnke, Kristina; Grantham, Nancy; Lee, Monica; Cannon, Phillippa; Woolford, James; Cheatham, Reggie; Mankowski,

Matthew; Alcamo, Thomas; Drexler, Timothy

Cc: Arcaute, Francisco; Rowan, Anne; Kelley, Jeff

Subject: FW: East Chicago press clips

## East Chicago press clips

US EPA Region 5 – prepared by the Office of Public Affairs August 12, 2016

Experts: West Calumet lead levels 'alarming'

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Experts: West Calumet lead levels 'alarming'

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EAST CHICAGO — The majority of properties in the West Calumet Housing Complex registered lead concentrations in the soil exceeding 1,200 parts per million — the U.S. Environmental Protection Agency's critical threshold for emergency cleanup.

But what do the levels mean for residents?

And what amount of lead in soil poses an urgent health risk — one that requires relocating the East Chicago public housing complex's 1,000 residents, including 680 children?

According to EPA, lead levels pose a hazard when equal to or exceeding 400 parts per million in bare soil in children's play areas, and 1,200 ppm average for bare soil in the rest of the yard.

So to discover that nearly all West Calumet Housing Complex properties' soil registered above those levels is alarming, said Jill Johnston, a preventive medicine professor at the University of Southern California.

Johnston is monitoring a similar situation in Vernon, California, where high levels of lead contamination were found in soil near a shuttered battery recycling plant. More recently, higher blood levels of lead were found in children living in neighborhoods near the plant.

"From what we know, any amount of exposure to lead, especially in fetuses and young children, is dangerous. There's evidence suggesting it leads to lower IQ points, hyperactivity," Johnston said.

That said, can a person also reasonably compare this crisis to that of Flint, Michigan — where dangerous levels of lead have been discovered in drinking water, not yards?

Experts say yes.

"You don't typically ingest soil on a normal routine, like you do with water, but of course a lot of children do, and the soil can get tracked inside the home," said Dr. Bruce Lanphear, an expert on childhood exposure to lead and other toxins at Simon Fraser University in Canada.

The Centers for Disease Control and Prevention has stated that health risks associated with lead do not depend on the medium in which lead is found — it's the cumulative dose and the vulnerability of the individual person instead.

In other words, exposure risks depend on how often children, and adults, interact with the soil, Lanphear said.

"Are families gardening in the yard, growing vegetables? Are children playing in the dirt, placing soil into their mouths?" Lanphear said.

Having studied the effects of lead exposure the last 30 years, Lanphear said one thing is certain: Even at low levels, regardless of medium, the toxic metal can have a lasting impact on children's academic achievements, levels of intelligence and ability to pay attention.

Infants and children up to age 6 are particularly at risk when exposed to lead, he said.

## **Blood levels among residents**

From 1991 to 2012, the CDC considered lead levels of 10 micrograms per deciliter or more in blood as the reference point requiring action.

In 2012, the federal agency updated its recommendations on children's blood-lead levels, noting it could find no evidence there is any safe level of lead exposure for children.

Now, the CDC considers blood lead levels of 5 micrograms per deciliter to warrant action.

At least 4 million of the nearly 125 million households in the U.S. have children who are being exposed to high levels of lead, and it's estimated about half a million children ages 1 to 5 have blood lead levels higher than 5 micrograms per deciliter, according to the CDC.

The city has urged residents to have children's blood tested for lead through the East Chicago Health Department. Local health officials said Aug. 3 more than 200 children residing in the West Calumet Housing Complex have been tested by the health department for lead since July 1.

Lanphear said lead levels in blood, at any level, should be a cause for concern.

"To put it in a context, I don't use the phrase 'normal' anymore for lead levels," Lanphear said.

"You can talk about iron levels, or red blood cell counts, as being normal, because

those have physiological purposes, but when you have something like lead, where there's no physiological purpose, there really isn't a normal level."

Nayesa Walker, a lifelong West Calumet resident, said results from a test July 29 at St. Catherine Hospital show her two boys tested negative, while 4-year-old daughter Kaelynn had blood lead levels of 4.2 mg/d — just below the CDC's 5 mg/d threshold for action.

However, doctors have asked her daughter be retested Aug. 29 to monitor her levels moving forward. Two years ago, Kaelynn tested above the CDC's 5 mg/d threshold for lead levels, she said.

Walker is concerned about what she's been hearing — how lead exposure can cause learning disabilities and have permanent effects on children's brain development.

"I've lived here all my life, and they knew all this time?"

The city has been working with the U.S. Department of Housing and Urban Development to relocate about 1,000 residents — including 680 children — and possibly demolish the decades-old public housing complex.

## Lead, arsenic at the E.C. site

The complex, which was built in the 1960s, and Carrie Gosch Elementary School occupy about 50 acres of a 400-acre area listed on the U.S. EPA Superfund National Priorities List in April 2009. The Superfund site is named after USS Lead, which operated on land south of the West Calumet complex.

Two lead smelter operations, Anaconda Lead Products and International Lead Refining Co., once operated on the site of the housing complex and the school, according to EPA documents.

A short distance to the east of the housing complex, DuPont operated a plant that manufactured lead arsenate pesticide. High levels of the carcinogen arsenic also have been found in the soil and correlate with lead levels.

According to the CDC, children and adults who are exposed to high levels of arsenic may experience irritation of the stomach and intestines, blood vessel damage, skin changes, and reduced nerve function. There is some evidence that exposure to arsenic in early life may increase mortality in young adults, according to the federal agency.

According to the city and EPA, soil testing data revealed lead levels in the soil up to 91,100 ppm, which is 75 times higher than EPA's emergency cleanup threshold, at one site.

Those EPA standards for soil-lead levels were set in 1991 and haven't been revised since that time despite petitions by environmental groups like the Sierra Club, Lanphear said. U.S. Sen. Dick Durbin, D-III., is among those urging the EPA to revisit the soil-lead standards in light of the CDC's findings that there are no safe exposure levels, he said.

It's a concern, Lanphear said, noting the state of California has set residential soil-lead standards at 80 ppm — far lower than the federal EPA's.

Lanphear believes EPA's standards are outdated and do not reflect what the scientific community now knows about lead exposure's impact on children's health.

In an email Wednesday, EPA stated it has agreed to revisit lead-soil standards, but has not committed to a specific level for its current lead-dust hazard standard.

The EPA stated that under current lead-soil cleanup standards, "remediation of sites with lead-contaminated soil, combined with activities to address other lead sources, has proven to be an effective part of an overall strategy for reducing blood-lead levels in children."

In East Chicago's West Calumet Housing Complex, EPA lab testing for depths of 0 to 6 inches in the soil shows lead levels range from 107 parts per million to as to high as 45,000 ppm. When EPA reached depths of 18 inches, the agency discovered lead levels as high as 91,100 ppm.

"Those levels should be dealt with immediately, or urgently," Langhear said.

"When you've got large communities that are contaminated, you've got to figure out ways to prioritize it. So oftentimes, you should look at levels, and there should be a plan to prioritize it."

The EPA began testing properties in late 2014, but residents only began receiving letters notifying them of results in June and July of this year.

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